ORGANIC DATA VALIDATION REPORT

To: Kristie Warr, Weston Solutions, Inc.
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Report Date: April 27, 2013
Project/Site: West Fertilizer, Inc. Explosion
Laboratory No: 280-41262-1

This memo presents the organic data validation report for the data obtained during the field activities for the above referenced work assignment. The purpose of this review is to provide a technical Level II validation of the following soil samples collected on April 21, 2013 and analyzed by TestAmerica Laboratories, Inc.:

Field Sample Numbers	Laboratory ID	Analyses
WFE01-01-51-20130421	280-41262-1	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE02-01-51-20130421	280-41262-2	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE03-01-51-20130421	280-41262-3	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE04-01-51-20130421	280-41262-4	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE05-01-51-20130421	280-41262-5	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE06-01-51-20130421	280-41262-6	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE07-01-51-20130421	280-41262-7	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A

Field Sample Numbers	Laboratory ID	Analyses
WFE07-01-52-20130421	280-41262-8	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE08-01-51-20130421	280-41262-9	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A
WFE09-01-51-20130421	280-41262-10	Semivolatiles by Method 8270C Organophosphorous Pesticides by Method 8141B Herbicides by Method 8151A Glyphosate by Method 8321A

Data validation was conducted in accordance with the USEPA CLP National Functional Guidelines for Evaluating Organics Analyses, June 2008, the Test Methods for Evaluating Solid Wastes, SW-846, 3rd Edition, and the appropriate USEPA Methods.

Level II validation was performed on the samples as defined by the Handbook of Environmental Analysis provided by Weston Solutions, Inc. The data were evaluated based on the following parameters:

	Data Completeness
*	Holding Times and Preservation
	Blanks
	Surrogate Recoveries
	Matrix Spike/Matrix Spike Duplicates
*	Laboratory Control Samples/Laboratory Control Sample Duplicates
*	Field Duplicates

*	**All criteria were met for this parameter**
NA	**Not applicable**

Data Completeness

All data necessary to complete a Level II data validation were provided for all analyses.

The laboratory "JK" or "K" flagged benzo(b)fluoranthene and benzo(k)fluoranthene results in samples WFE01-01-51-20130421, WFE02-01-51-20130421, and WFE09-01-51-20130421 since the peaks were not resolved. Detected and non-detected benzo(b)fluoranthene and benzo(k)fluoranthene results in these samples are qualified as estimated (J or UJ).

All soil samples for Method 8151A (herbicides) were analyzed at a 10-fold dilution due to the sample matrix. Raw data were not provided or evaluated for this Level II package to verify results and analytical dilution.

The laboratory correctly "J" flagged results less than the reporting limits. Detected results greater than the method detection limit (MDL), but less than the reporting limit (RL) are qualified as estimated (J) unless qualified as not detected for blank contamination.

The laboratory correctly "T, J, N" flagged SVOC tentatively identified compounds (TIC). Detected TIC results are qualified as estimated (NJ) unless qualified as not detected for blank contamination.

Holding Times and Preservation

The samples were analyzed within the required holding times. The samples were received within the 4 ±2°C QC limit. No shipping or receiving problems were noted.

Blanks

Method blanks were extracted and analyzed at the required frequency. No contaminants were found in these blanks with the following exceptions:

SVOCs: Five TICs were detected in the method blank. Four of these compounds were also detected in the field samples. Therefore, the following TIC results were qualified as undetected (U):

- 3-Penten-2-one, 4-methyl- in samples WFE05-01-51-20130421 and WFE06-01-51-20130421
- 2-Pentanone, 4-hydroxy-4-methyl- in all samples
- 2-Pentanone-4-methoxy-4-methyl- in all samples
- Benzene-1,2,3,4,d4-, 5,6-dichloro- in samples WFE02-01-51-20130421, WFE03-01-51-20130421, WFE07-01-51-20130421, and WFE09-01-51-20130421

Glyphosate: Glyphosate was detected in the method blank above the MDL but below the

RL. Therefore, the following results were qualified as undetected (U):

- Glyphosate in samples WFE01-01-51-20130421 and WFE04-01-51-20130421

No field blank samples were submitted with this SDG.

Surrogate Recoveries

Surrogate compounds were added to the samples and QC samples. The surrogate percent recoveries were within laboratory QC limits with the following exceptions:

Herbicides: The recoveries for 2,4-dichlorophenylacetic acid on one or both columns in three samples were below laboratory QC limits and in two samples were above laboratory QC limits. Since all samples were analyzed at a 10-fold dilution the surrogates are considered diluted out. No action was taken.

Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate (MS/MSD) were provided for all analyses. The percent recoveries and relative percent differences (RPDs) were within laboratory QC limits with the following exceptions:

Herbicides: The recoveries for several compounds in the MS/MSD were reported as "NC" (not calculated). Since the MS/MSD were analyzed at a 10-fold dilution the compounds are considered diluted out. No action was taken.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) analyses were provided. The percent recoveries and RPDs were within laboratory QC limits.

Field Duplicates

Soil field duplicate samples WFE07-01-51-20130421 and WFE07-01-52-20130421 were analyzed in this SDG. Field duplicate precision criteria were met (i.e., for results greater than five times the reporting limit, RPDs were less than 50% for soil samples and for results less than five times the reporting limit, the difference between the duplicate and the original was less than 3.5 times the reporting limit). No qualifications were applied based on field duplicate precision.

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

R - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.

U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.

N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

NR - Result was not used from a particular sample analysis. This typically occurs when more than one result for a compound is reported due to dilutions and reanalyses.